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Applicant(s): Kuramitsu, et al.
NOVEL DNA REPAIR ENZYMES, NUCLEIC ACIDS
ENCODING DNA REPAIR ENZYMES AND METHODS OF

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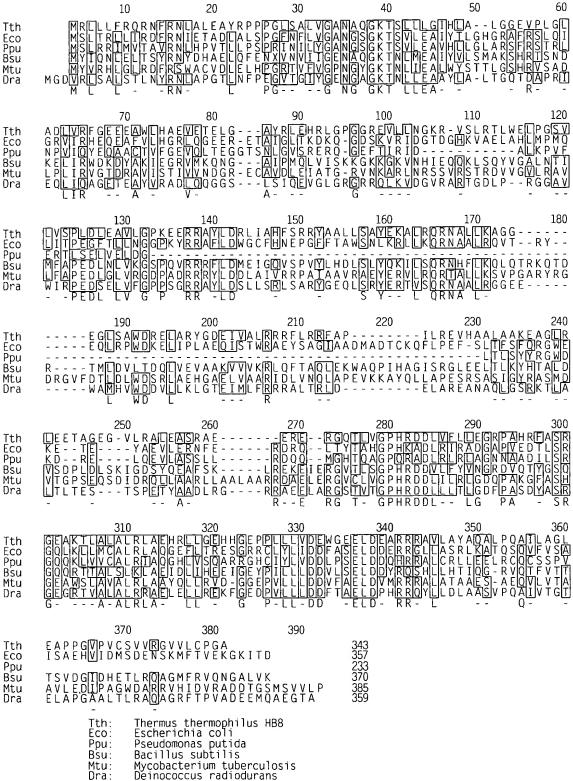


FIG. 27



Applicant(s): Kuramitau

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NOVEL DNA REPAIR ENZYMES, NUCLEIC ACIDS ENCODING DNA REPAIR ENZYMES AND METHODS OF

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RecJ_Tt RecJ_Ec RecJ_Aa RecJ_Hp RecJ_Hi	[73] [73] [78] [47] [68]	Motif I KRIRVHGDYDADGLTGTAILV TRIIVVGDFDADGATSTALSV KRIIIVGDYDVDGITGTAILLY TEILVVGDYDADGVISSAIMA QKIVIVGDFDADGATSTALSV	LAMRSLG RVLKLLG KFFESLN	[100] [100] [105] [74] [95]	
PPX1_Sc PRUNE_Dm	[30] [38]	TICVGNESADMDSTASATTYS HLVMGNESCOLDSAVSAVTLA	1 1	[57] [65]	
	Motif II				Motif III
RecJ_Tt RecJ_Ec RecJ_Aa RecJ_Hp RecJ_Hi	[129] [131] [133] [102] [126]	SDLFLTVDCGITNHAELRE AQLIVTVDNGISSHAGVEH GDFLITVDNGTSAVEEIDQ APLIITVDNGINAFEAARF VQLLMTVDNGVSSFDGVAF	[147] [149] [151] [120] [144]	[153] [155] [154] [126] [150]	VEVIVTPHHTPGK [165] IPVIVTPHHLPGD [167] LETVVIPHHNVPP [166] YTLIITPHHCLHH [138] IRVLVTPHHLPPE [162]
PPX1_Sc	[120]	ELNSTLVDNNDTPKNLKNY	[138]	[141]	NVVGIIDHHFDLQ [153]
PRUNE_Dm	[88]	PLVC <u>EMWO</u> CRARVALPRRY	[106]	[129]	NVTEILDHRPLED [141]
		Motif IV			Specific Motif
RecJ_Tt RecJ_Ec	[210] [226]	YADLAAVGTIADVAPLWGW LLDLVALGTVADVVPLDAN	[228] [244]	[386] [422]	DLLLRYGGHKEAAGFAM [402] GMMLKFGGHAMAAGLSL [438]
RecJ_Aa	[215]	FLDLVALGLUADYMPVNPV	[233]	[404]	DMFLKWGGHDKAMGLTL [420]
RecJ_Hp	[189]	LLCLAGVATIADMMPLTFF	[207]	[372]	SLLLGYGGHRQACGLSV [388]
RecJ_Hi	[219]	LLDLVALGTIADVVPLDQN	[237]	[415]	NMILKF <mark>GGH</mark> AMAAGLSI [431]
PPX1_Sc PRUNE_Dm	[191] [183]	IALLIMGATI IDTSNMRRK VAQLIHATI VILDTINFAPA	[209] [201]		

 ${\tt Tt} \ : \ {\tt Thermus} \ {\tt thermophilus} \ {\tt HB8}, \ {\tt Ec} \ : \ {\tt Escherichia} \ {\tt coli}, \ {\tt Aa} \ : \ {\tt Aquifex} \ {\tt aeolicus},$

Hp : Helicobacter pyroli, Hi : Haemophilus influenzae Rd.
Sc : Saccharomyces cerevisiae, Dm : Drosophila melanogaster

FIG. 14